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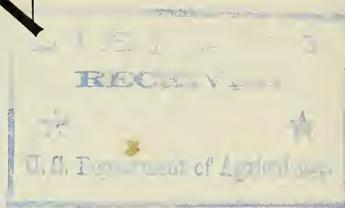
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1900

SEED LABORATORY

GOLDEN MINTS



New Series. Volume I. Number 1. January, 1900. Price 5 cents.

The Orcutt Seed and Plant Company, San Diego, California.

Cable address:

ORCUTT, San Diego, California.

Established 1882.

AS WHOLESALE SEEDSMEN AND PLANTSMEN we offer our services to the horticultural trade for the procurement of any seeds, bulbs or plants that may be desired; our correspondence extends over the entire world, and our facilities and experience as collectors, importers, and growers, allow of few competitors.

TERMS CASH WITH ORDER except by special agreement; all goods travel at the risk and expense of purchaser; boxes and bags charged at cost; complaints must be made within ten days or receipt of goods to receive recognition.
Species first introduced by us.

BULBS.

LILIES FROM NEAR AND FAR.

Twenty-five at the rate per 100; less than 25 at double these rates; 1000 of a kind at one-third discount.

AGAPANTHUS UMBELLATUS L'Herit.

African Love Flower, or Blue Lily of the Nile; an effective decorative plant, ever green, with large umbels of bright flowers that are of great merit, 25c.

ALLIUM HAEMATOCYTHON Watson.

The mesas and hills around San Diego are decked in springtime with the clusters of bright purplish-tinted flowers of this wild onion, which deserves a prettier name at the hands of its friends. It does not prove quite hardy in New England, but will give enough pleasure for the cost of growing in the house among its more showy cousins.

Per 100.
Allium haematocytion Watson: fine.....\$ 1 00
Amaryllis formosissima a.....

Spreakella formosissima is the true name of this brilliant Mexican flower 1 c.; doz \$1 50

Amaryllis longifolia roseo-alba? The true name of this showy garden flower is unknown yet to us. Large blooming bulbs, 25c.

ANTHOLYZA AETHIOPICA Linn.

Excellent gladiolus-like red flower, apparently not offered elsewhere in this country. 10c

BEHRIA TENUIFLORA Greene. Grassy leaves about a foot long; flowers tubular, borne in an umbel, the stamens much exerted, brilliant scarlet in color, reminding one somewhat of Brevoortia Ida-Maia. A Mexican bulb nearly allied to Bessera elegans.

Prices quoted below are per 100 bulbs.—

- Behria tenuiflora 7 00
- Bessera elegans Schult. Mexico..... 2 00
- Bloomeria aurea: rich yellow flowers..... 1 50
- Clevelandi Watson: delicate lemon..... 3 00
- Brevoortia Ida-Maia, Wood. Firecracker 2 25
- Brodiaea capitata: large heads, lavender. 1 00
- capitata alba: charming, pure white... 2 40
- California: large, waxy pink or rose... 3 00
- congesta: violet purple, 2 to 3 ft. high. 1 50
- coccinea: Vegetable fire cracker..... 2 25
- filifolia, S. Watson. Lavender color.... 3 00
- galicis, S. Watson..... 6 00
- grandiflora: dark waxy purple, showy. 1 00
- Hendersonii, S. Watson..... 6 00
- Howellii, S. Watson 6 00
- ixioides (Caliphoa lutea): yellow, pretty 1 00
- v. minor, Hort. dwarf, yellow, banded 2 25
- lactea: white banded with green..... 1 00
- v. lilacina: larger white flowers..... 2 25
- laxa (blue milla, Ithuriel's spear): blue 1 00
- minor: fine royal purple umbels..... 2 25
- multiflora: umbels of violet flowers.... 1 50
- v. parviflora: color of English violets.. 1 50
- Orcuttii: lavender colored fls 5 00
- peduncularis: waxy porcelain white.... 2 25
- stellaris rich purple, white centers.... 1 50
- terrestris: royal purple, 2 inches high.. 2 25
- v. ubilis: Twining hyacinth, climbing.. 4 50
- mixed varieties \$6 per 1000..... 90
- Calochortus albus: Fairy Bell, pearly w... 1 80
- amoenus: glowing rose pink..... 4 50
- apiculatus: "shade of straw yellow"... 6 00
- Baylardianus: drooping purple and yel. 8 00
- Benthamii: open cup-shaped flowers... 2 25
- flavus (Cyclobotbra flava): golden shell 2 00
- flexuosus: lilac fls, a fine butterfly tulip 10 00

Calochortus—continued.

Greenet: lilac, barred with yellow.....	10.00
Gunnisoni: light lilac, purple banding..	10.00
Howellii: true, light yellow.....	10.00
Kennedyi: magnificent dazzling scarlet	10.00
Leichtlinii: much like Nuttallii.....	3.00
lilacinus: lilac shading to purple, fine..	1.50
longibarbatous: fine purple, a foot high.	6.00
luteus: yellow fls, dotted with brown..	1.50
v. concolor: large bright yellow flowers	7.50
macrocarpus: large purple flowers.....	4.50
maweanus: white, silky blue hairs, fine	1.50
v. major, Hort. Twice the size of type	2.25
v. roseus, Hort. Pale rose tinged.....	2.25
nitidus: purple and green fls, flexuous.	7.50
nudus: dwarfish in habit, purple fls....	4.50
Nuttallii: large white fls, green banded	4.50
Palmeri: a rare and beautiful sort....	7.50
Pummerae (Weedii purpurascens)	7.50
pulcherrus: star tulip, pendant flowers.	1.50
Purdy Greene: pale lilac fls, new.....	4.50
spenders: lavender color	3.00
v. atroviolacea: purple, with red spots.	2.00
v. rubra, Hort. "Deep reddish purple."	3.00
Tolmiei: very large white pendant fls..	2.25
venustus citrinus: lemon yellow.....	1.50
venustus oculatus: finely marked fls...	1.50
venustus purpurascens: purple centers	2.25
venustus sulphureus, Hort. Clear yellow	10.00
venustus sargolaeus, Hort. Deep red..	10.00
venustus picus, Hort.....	2.25
venustus vesca: White, suffused with	
lilac	4.50
venustus roseus: creamy inside	2.40
Weedii: orange butterfly tulip, fine ...	4.50
Weedii alba: pure white.....	10.00
mixed varieties, choice selections.....	1.20
Camassia "alba"	12.50
Cusickii: purple giant, great novelty...	25.00
esculenta: dark blue fls, edible bulbs...	9.90
Leichtlinii	7.50
Chlorogalum argusiflorum, dwarf size..	4.50
parviflorum and pomerdianum, each...	4.50
Erythronium grandiflorum (giganteum)..	1.50
grandiflorum minor, yellow flowers...	6.00
Hartwegii, large yellow fls, beautiful...	2.25
Hendersonii, pink fls, center blackish..	4.50
Howellii, white turning pink, Oregon..	6.00
Johnsoni: glowing pink, orange center	6.00
montanum, 3 to 4 large pure white fls..	4.50
purpurascens, rare and beautiful.....	4.50
Smithii, white fls turning purple.....	3.00
Freesia refracta alba: seed \$3 per lb.....	6.00
Fritillaria atropurpurea	4.50
biflora: ch e late lily, white, purple fls	3.00
cochina: much like recurva, pretty fls	6.00
lanceolata, curious mottled coloring...	3.00
v. gracilis, nearly black, pretty.....	4.50
lilacea, white, otherwise like biflora...	3.00
parviflora	4.50
puriflora: clear reddish purple.....	7.50
puddia, charming yellow or orange fls.	4.50
recurva, scarlet bell-shaped flowers....	3.00
Lesser callis undulata, desert lily.....	20.00
Leucocorinum montanum, delicate white.	6.00
Lilium Bolanderi, Oregon, quite rare	60.00
Columbianum, like dwarf Humboldtii..	7.50
Humboldtii, orange, with black spots..	10.00
montanum, blood red flowers	15.00
pardalium, red and orange	4.50
v. minor, canary yellow, spotted fls....	7.50
v. Bourgeoi, lustrous fiery red	20.00
Parryi, delicate lemon yellow, fragrant	15.00
parvum, scarlet spotted with brown...	12.50
rubescens, opens white, very fine	50.00
Washingtonianum, white, very fragrant	12.50
Washingtonianum purpureum	10.00
Milla biflora, Cav. A popular Mexican...	2.00
Mulla maritima, small whitish flower...	3.00

Richardia Africana, calla	4.00
SCILLA HYACINTHOIDES Linn.....	4.50
Stropholirion Californicum, Torrey.....	3.00
Trillium sessile californicum	3.00
ovaum, white, turning to wine purple..	3.00
Zygadenus Fremontii, creamy white fls..	4.50
paniculatus, stouter and taller	4.50

CACTI.

Genus ANHALONIUM Lemaire.

ANHALONIUM ENGELMANNI Lem. A remarkable, spineless cactus, aptly called the Living Rock, found in Texas and Mexico. A. fls. uratum Engelmann, has priority.

A. FOSSURATIUM Engelmann.
"Upper and exposed part of tubercle triangular in outline, convex, carinate and almost smooth below, convex and variously fissured and thereby verrucose above, sharp and crenate on the edges."—Engelmann.
Living Rock, a curiosity. 50c-1.00

A. FURFURACEUM—Mammillaria furfuracea Watson—near prismatica cum. \$2.00

A. LEWANI—a form of Williamsii,—not in stock but order booked at 30c.

A. SILECATUM Sam Dyer, of a very distinct aspect, flattened top small growth. 2.00

A. WILLIAMSII—more properly an Echinocactus, miscal but not s—see Lophophora. 3c

Genus ARIOCARPUS Scheidw.

An older name than Anhalonium, recently revived by Schumann and other botanists, we prefer to retain in the name by which they are and have been universally known over 50 yrs.

Genus ASTROPHYTUM Lemaire.

ASTROPHYTUM MYRIOSTIGMA Lem.
"Bischof's hood," a beautiful thing & odd. 75c.

CACTUS DENSISPINUS Coulter.

Mammillara densispina, M. fuscata. \$2.00

Genus CERESUS Haworth.

CERESUS ALAMOSENSIS Coulter.
"C. Sonora Runge; sina bona; 2-8 ft. high, 2-10 branches from the base with joints 1-4 ft. long, flexuous & decumbent, often forming arches and rooting at the joints and ths is widely spreading, often covering 10 feet, ribs about 7, slightly tuberculated, flower red. Mexico. \$1

CERESUS BERLANDIERI Engelm.

A small decumbent species bearing large purple sweet-scented flowers. 20c.

CERESUS CAESPITOSUS Engelm.

The Lace Cactus, a beautiful little species, found in Texas and Mexico, with large magenta colored flowers, blooming when only 2 inches high, the flowers 2 inches across, and lasting 2 days. The plant is enveloped with fine white spines, and can be "handled without gloves."

25c: (compressus (triangularis v.), cuttings . 20c.

CERESUS CHLORANTHUS Engelm.

A form of viridiflorus, with beautiful red and white spines and greenish flowers. 30c.

CERESUS COCHAL Orcutt.

An arborescent cactus probably identical with geometrizans. \$1 specimen plants, \$50

CEREUS COLUBRINUS Otto.

Native of Cuba; night blooming; sweet-scented white flowers 6 inches across, 25c upward.

CEREUS DASYACANTHUS Engelm.

Texas; usually covered with delicately colored spines & bearing showy orange yellow fls. 20c - \$2

C. EHRENBERGII Pfeiffer. Mexico.

Resembles Berlandieri, but larger & more erect 50c.

CEREUS EMORYI Engelm. This is one of the best-known of California cacti, the slender, thickly-set yellowish spines giving it a peculiarly beautiful appearance. The spines on the young joints are shorter, soft and flexuous; the flowers are yellowish, followed by a small edible fruit.

Large established plants, \$5; smaller... 15c.

CEREUS ENGELMANNI Parry. Heads several (sometimes, though rarely, a hundred,) 4 to 12 inches high, cylindrical or ovate, with 11 to 13 ribs bearing bunches of about 13 pale radiating spines, and about 4 darker (yellow, brown or black), stout and angular, straight or curved central spines, 1 to 3 inches long. Flowers very numerous, bright magenta, often 4 inches across, followed by delicious fruits, with much the same flavor of a strawberry, red, pulpy, filled with black seeds. Utah, California, Baja California and Arizona.

Fine clusters of 50-100 heads \$10 \$50; small 25c.

V. albispinus: ivory-white spines, 75c - \$6.

V. chrysocentrus: canary yellow spines, 50c

V. variegatus: black & white spines, 50c. up.

CEREUS ENNEACANTHUS Engelm.

Magenta fls., collected to order 10c. up.

CEREUS ERUCA Brandegee.

Chileola; only a few remain..... \$2 50

CEREUS FENDLERI Engelm.

Queen or gul or caspitose plants, 3-4 inches in diameter, about 6 inches high, rarely more than 12 heads in a cluster, distinguished by the one usually black central spine which often curves upward, magenta fls., variable. 35c.-\$6

CEREUS FLAGELLIFORMIS Haworth. The well-known whip-cord or Rat's-tail Cactus, so useful in hanging baskets or for grafting on columnar species; the bright rose-colored flowers are extremely attractive.

Small plants 10c. up, larger special prices.

CEREUS FOSSULATUS Hort. Mexico.

§Pilocereus. \$ - few only.

CEREUS GEMMATUS Zucc Mexico. 50c.

CEREUS GIGANTEUS Engelm.

Giant cactus or saguaro, the largest known species, of en 40 or more feet high \$1 up.

CEREUS GRANDIFLORUS Haworth. "The night-flowering cereus has gained a fame which entitles it to prominent notice, and plants might well be included in every garden, for its flowering is a source of interest to the least observant persons."—Castle.

10c. up.

CEREUS GREGGII Engelm.

Night blooming fragrant white fls., tuberous roots and tender bearing stems. \$ - \$5

CEREUS GUMMOSUS Engelm.

Pitilla agria or cord-wood cactus, a widely spreading plant with stout black or gray spines, noted for its delicious fruit. \$2 up.

CEREUS HOPPENSTEDTII.

Mexico. §Pilocereus. \$2 up.

CEREUS MAC DONALDIAE Hook. A handsome slender-stemmed species, of Honduras, Central America, and one of the finest of the night-flowering cacti. Flowers 12 to 14 inches across, with creamy white lanceolate petals, with an outer fringe of narrow yellow sepals; with a fragrance like vanilla.

We no longer consider this distinct from Cer. grandiflorus.

CEREUS MARITIMUS M. E. Jones.

Resembles mojaviensis in aspect, fls. ye. low. \$1

CEREUS MOJAVENSIS Engelm.

Occurs in almost inaccessible mountain canyons in the mohave desert where its blood-red blossoms have oft enchanted the solitary prospector; the clusters of short heads form a very symmetrical plant like a cushion of green satin filled with needles—a form of polyacanthus. \$1

V. Zuniensis from Arizona—a finer form. \$2

CEREUS MULTIPLEX Hort. (§Echinopsis).

Beautiful pink fls. 25c.-\$3

CEREUS NAPOLEONIS R. Graham.

Near triangularis—probably a form only? \$1

CEREUS NYCHICALUS Link.

Yellowish fls., night-blooming, distinguished from grandiflorus by its 4-angled stems 2 c.-\$1

CEREUS PALLIFICUS (Engelm.) Coulter.

Form of polyacanthus, caespitose, crimson fls. Originally described as a form of phenicus. From type locality, \$2 up to \$100 for clusters.

CEREUS PECTEN-ABORIGINUM Engelm.

Erect, about 20 feet high, branching, bearing reddish fls. & curious spiny fruit resembling giant chestnut burs, from which the Indians made combs—hence its name; 'Hecho' \$8 up.

CEREUS PECTINATUS Engelm.

§Echinocereus. Fragrant magenta fls. 25c.

CEREUS PENTALOPHUS De Candolle.

Related to Berlandieri. 40c.

CEREUS PERUVIANUS MONSTROSUS Hort.

Grotesque in the extreme 75c. up.

CEREUS POLYACANTHUS Engelm.

Hardy, crimson fls., of easy growth. \$1 up.

CEREUS PRINGLEI S. Watson.

§Lepidocereus. The 'cardon' of Sonora and

Baja California, resembling giganteus. \$2 up.

CEREUS PROCBUMENSIS Engelm.

Near Berlandieri, spreading prostrate stems with fls. 3 inches across., rose purple. 20c.

CEREUS PUGIONIFERUS Lem.

None in stock, Mexico; form of geometrizans.

CEREUS REGELII Hort

Form of grandiflorus named in honor of Dr. R.

CEREUS RIGIDISSIMUS Engelm.

Echinocereus caudicans of catalogs, famous as the Rainbow cactus, considered by Engelm. as a form of pectinatus 40c.-\$1

CEREUS SARGENTIANUS Orcutt.

§Pilocereus. Form of Schottii. 18 inch cuttings with beautiful flesh-colored hair. \$3; smaller rooted plants 4 c. up.

CEREUS SCHOTTII Engelm.

§Pilocereus Sonora. \$1 up

V. AUSTRALIS Brandegee, new, \$4

OLD MAN CACTUS.

CEREUS SENILIS Salm-Dyck.

§Pilocereus. The old man cactus attracts universal attention, receiving its popular & very appropriate name from the long, flexible, ivory white spines, giving the plant a most grotesque appearance, like the top of an old man's head in miniature. In Mexico it attains a height of 20 to 30 ft., 9 or 10 inches in diameter, its fluted character giving it somewhat the appearance of an architectural column. When young the stems are succulent, but with age the tissues become filled with 60 to 80 per cent. of oxalate of lime in small sand-like grains. 40c.-\$2

CEREUS SPECIOSISSIMUS DC.

Mexico; bears in profusion large crimson fls., often 8 inches across. 25c.-\$1

C. SPLENDENS Hort.

Our plants under this name are indistinguishable from *colubrinus*, but have not yet fled.

CEREUS STRAMINEUS Engelm.

None in stock; 50c. upwards.

CEREUS THURBERI Engelm.

Pitahaya dulce, a noted Mexican species, 5 ft. high, bearing delicious fruit. \$1 upwards.

CEREUS TRIANGULARIS Miller. The Strawberry Pear bears most beautiful flowers scarcely less handsome than *C. grandiflorus*, measuring 12 to 14 inches across; the bright scarlet fruit, the size of a goose's egg, has a flavor compared to strawberries; the plant is easily distinguished by its triangular stems, and makes a most luxuriant growth, climbing readily to the top of its support.

Rooted cuttings usually in stock at 10c. up.

CEREUS TUBEROSUS.

The small tuberous roots produce slender stems 1-4 feet high, covered with a delicate lace-work of interlacing white spines. Flowers terminal, over 2 inches across, pale rose purple. A liniment can be made by steeping the tubers in alcohol, "said to be a 'sure cure' for rheumatism." *C. Poselgerianus* Coult. & probably *C. Poselgeri* Hort. are other names of this plant. None in stock but quickly obtained at 15-80c.

CEREUS VARIABILIS Pfeiffer.

Engelmann's *variabilis* is the plant commonly sold under this name—the older stems triangular, armed with sharp straight spines, & a night bloomer, true name is *C. princeps* Hort. 2c.-\$1 True Pfeiffer's *variabilis*. I have yet to see.

CEREUS VIRENS DC.

Pilocereus Houletianum & *tilophorus*, &c.

CEREUS VIRIDIFLORUS Engelm.

§Echinocereus "Lovely purple & white spines." 25c.-\$1

Genus ECHINOCACTUS Link & Otto.

E. ACANTHODES Lem.

This old name has recently been revived by Dr. Weber of Paris for the plant now familiar to us under the name of *E. cylindraceus*.

E. ARRIGENS Link.

Wavy ribs, straight leaf-like central spines, with dark lilac flowers. None on hand.

ECHINOCACTUS BICOLOR Gal.

Fls. 2-3 inches long, bright rose purple; plant 4-8 inches high, with spines of rainbow tints. 35c

ECHINOCACTUS BREVIHAMATUS E.

By bright green, spines white & brown, the lower spines strongly hooked, profuse flowers 25-50c

ECHINOCACTUS CALIFORNICUS Mon.

E. viridescens has been cultivated in Europe it is said, but Dr. Weber has recently published a description of a plant from Lower California & claims it to be identical with *Mouville's* plant. *E. CAPRICORNIS* Dietr. Mexico

Few deeply cut ribs spotted with white dots & entirely spineless but for a crown or tuft of interlacing spines; fls. a sassy yellow with a deep red center; called an *Asphytum* by some. 50c

ECHINOCACTUS CHRYSACANTHUS O.

Originally sent out as a variety of *Emoryi*, it is globose to cylindrical, with about 18 ribs & 11 flexuous annular central spines 2 inches long, & 4 to many slender white radial spines; satiny yellow to crimson fls. \$1-\$8

ECHINOCACTUS COPTONOGONUS Lm.

A small growing bushy plant, with few broad upturned light colored spines lying close to the ribs, fls. striped with purple 50c-\$1 50

ECHINOCACTUS CORNIGERUS DC.

Lizard cactus—broad sharply hooked reddish spines ¼ inch across. 20c-\$2

Var. *FLAVISPIA*: yellowish spined; both var have rose purple fls. & are not very distinct.

ECHINOCACTUS CRISPATUS DC.

Mexico: 30-40 compressed ribs; fls. striped. \$1

ECHINOCACTUS CYLINDRACEUS E.

Handsome, sometimes 10 feet high, fls. & spines yellow, but in young plants the color of the spines is variable—hence the following:—

Var. *ALBISPINUS*—with ivory white spines;

Var. *BICOLOR*—red & yellow spines;

Var. *RUBRISPINUS*—with red spines.

Prices from 25c to \$50 for cristate specimens.

ECHINOCACTUS EMORYI Engelm.

\$1-\$15 for plants from 4 inches to 2 ft. in diam.

ECHINOCACTUS ERECTOCENTRUS C.

"*Mamillaria Childsi* A grand new Cactus from the mountains of Arizona. It is quite hardy, being found at a latitude where snow and ice is plentiful. One of the loveliest plants known to cultivation. Growth short and globular, with numerous spines which have a peculiar and beautiful luminous blue color, making it at all times a lovely object and a fine companion to the Rainbow Cactus. Its flowers are freely borne, large, white, tinted pink and with a deep pink bar through the center. 30c. each; 2 for 50c." John Lewis Childs, 1894, with figure.

Near *E. intertextus*—a well marked variety.

E. FOHDII Orcutt, Review *Cactaceae*, i. 56

Globose, 6 inches or more in diameter, with about 18 tuberculated narrow ribs closely set with clusters of stout ash gray spines, 4 central, annulated, the longest 1¼ inches long, and hooked; 2 slender spines above with about 14 divergent radials; flower an inch across, about 32 rose purple petals in 2 series, 9 greenish stigmata, style tinged with red, filaments red at top and yellow at base, anthers orange yellow. Near Laguna head, Baja California, named for Lyman M. Ford, of San Diego, who has taken a great interest in these plants. Apparently the same plant was distributed in 1894 from near San Quintin bay as a form of *E. peninsulae* \$1-6

ECHINOCACTUS HORIZONTHALONIUS Lem

Glaucous, globular, 8-ribbed, with clusters of rigid gray spines; fls rose purple 25c-\$1

ECHINOCACTUS INTERTEXTUS Em.

Var. **DASYACANTHUS**—egg shaped. 40c.

ECHINOCACTUS JOHNSONII Engelm.

This rare & handsome species grows in out-of-the-way desert places & costs much trouble to secure; numerous reddish ash colored spines—turning a deep red when wet. \$1-\$8

ECHINOCACTUS LECONTEI Engelm.

Typical form not in hand; the Californian var. (perhaps a form of *cylindraceus*) is the plant commonly sold under this name. 25c up

ECHINOCACTUS LIMITUS Engelm.

Form only of *viridescens*—not distinct.

ECHINOCACTUS LONGIHAMATUS Gal.

Heavily notched dark green ribs with very long hooked central spines; fls reddish. 50c.

E. LOPHOTHELE Salm. Mexico.

Ribs broken into irregular tubercles bearing long central spines. 50c.

ECHINOCACTUS McDOWELLII Rebut.

A very beautiful Mammillaria-like species of Mexico, thickly set with long bright straw colored spines which completely hide the plant. \$1

ECHINOCACTUS MULTICOSTATUS.

A remarkable species, small, with 90-120 narrow ribs None on hand. 50c-\$3

ECHINOCACTUS ORCUTTII Engelm.

None on hand at present \$1-\$100

ECHINOCACTUS POPYRACANTHUS E.

No living plant known in cultivation.

ECHINOCACTUS PENINSULAE Eng.

Globose to cylindrical, rarely over 18 inches in diameter but sometimes 8 feet high, with 12-21 compressed tuberculated ribs; spines dull red, 7 stout centrals and 11 radials—the stoutest not rarely 4-6 inches long and $\frac{1}{4}$ inch broad, hooked. \$1-\$75—one of the finest species ever offered.

ECHINOCACTUS POLYANCISTRUS EB

An exceedingly rare and strikingly beautiful plant, with 2 sorts of spines—numerous hooked round & brownish pink, & fewer ivory white not hooked; occurs singly at widely separated localities in the desert—hence called the "Hermit cactus." \$1-\$5

ECHINOCACTUS POLYCEPHALUS E.

Mohave desert, a rare & handsome species occurring usually in great clusters; spines purple 4-8 inches, 50-\$1; clusters \$3 upward

ECHINOCACTUS SCHEERII Sm-Dyk.

Texas, a pretty species resembling *brevihanatus* 20c

ECHINOCACTUS SETISPINUS Engelm.

Large yellow fls., coral red fruit. 25c

ECHINOCACTUS SILERI Engelm.

Utah, none on hand, will collect to order.

ECHINOCACTUS SINUATUS Dietr.

"E. subglobosus, apice rotundatus; costis 13 crassis angulato sinuatis, sinibus profundis acutis, areolis innatis demum subnudis, aculeis subnodosis, marginalibus 10-11 inequalibus setaceis rectis, junioribus hyalinis erubescensibus, adterioribus albo-griseis opacis, centrali unico longiore ensiformi apice hamato. Habitat in Texas."—Dietr. AGZ 1851. 345. 50c.

ECHINOCACTUS TEXENSIS Hoepf. Depressed, 13 to 27 acute ribs; spines stout, annulated, 6 to 7 radical ones and a stronger central spine; flowers rose colored; fruit subglobose, pulpy, red, covered with spiny bristles and soft wool, crowned by the wooly remains of the flower.

25-75c.

ECHINOCACTUS TROLLIETI Rebut.

Identical with *E. unguispinus*?

ECHINOCACTUS UNCINATUS Gal.

Var. **WRIGHTII** Engelm. Texas, rare, \$1

ECHINOCACTUS UNGUISPINUS Engm

Rare, Mexico; all sold. \$2-45

ECHINOCACTUS VIRIDESCENS Nutt.

The Turk's Head cactus, that occurs at San Diego, California; very variable, but usually depressed, less than a foot in diameter, with strong, annulated reddish spines; 13 to 21 ribs; fruit greenish or sometimes tinged with magenta, very sour, enclosing numerous black seeds.

Fine plants 10c-\$5

ECHINOCACTUS WHIPPLEI E. & B.

Plant 3-5 inches high, ovate-globose, 13-15 ribs, 7 compressed white radial & 4 hooked central spines. Very rare. \$1

E. WILLIAMSII Lem ex Salm.

"(Lem Cat. Cels. 1815, sine descriptione). C. humiliter inferne ramoso superne tuberculato cinerascete viridi, vertice impresso, tuberculis latis obsoletissime polyedris is costas subconfluentibus pulvillusque instructis remotiusculis lanigeris, lana cinerascete densa longa in penicillum erectum collecta. Floribus parvulis roseis."—Salm. AGZ. 1845, 38

Mescal button, Dumpling, & Turnip cactus are names applied to this queer thing, which has been known for years as an *Anhalonium*, & which Coulter makes the type of his new genus *Lophophora*. 30c

ECHINOCACTUS WISLIZENI Engelm.

The strong hooked central spine gives this the name of the Fish-hook cactus said to have so been utilized by the Indians; the large size and have given it the name of Barrel cactus; to the Mexicans, in common with most species of the genus, it is the *Visuaga*, utilized in confections.

Var. **ALBISPINA** Toumey, white spined.

Var. **DECIPIENS** Engelm

Prices 25c-\$10; 1 to 2 feet high \$2-\$10

E. WRIGHTII Engelm.—var. of *uncinatus*.

Genus ECHINOCEREUS Engelm.

Included under *Cereus*,

E. candicans Hort.—see *rigidissimus*.

Genus ECHINOPSIS Zuccarini.

Included under *Cereus*.

E. EYRIEII: short spines, white fls, 25-50c

ECHINOPSIS MULLERI. A hybrid, of rapid growth, blooming early, and with its large satiny rose-colored flowers is justly called the finest of its class.

Doubtless only a form of *multiplex*. 10-75c.

Genus EPIPHYLLUM Pfeiffer.

E. GAERTNERI: white fls. 25-50c

E. MACOYANUM: 25-50c ?

E. RUSSELLIANUM: 15-25c

EPIPHYLLUM TRUNCATUM Haw.

Inch, crab or lobster cactus. 15c-32

Genus LEPISMIUM Pfeiffer.

This genus is merged into Rhipsalis by some botanists, we have none to offer at present.

Genus LEUCHTENBERGIA Fisch.

LEUCHTENBERGIA PRINCIPIS Fisch.

Triangular tubercles about 3 inches long & surmounted by straw-like spines 4-6 in. long. \$1

Genus LOBLOPHORA Coulter.

LOBLOPHORA WILLIAMSII Coulter.

Best known as Acahalonium, & more properly as an Echinocactus (which see). 30c.

Var LEWISII (Acahalonium Lewisii): 50c.

Genus MALACOCARPUS Salm.

None to offer at present.

MAMMILLARIA ALVERSONI Hort.

"Differs from var. deserti in its more robust & branching habit. ** more numerous stouter & longer * spines, all black tipped (the centrals black half way down, shading into red), & pink fls. ** Fox-tail cactus." \$1

MAMMILLARIA ARIZONICA Engelm.

§ Coryphantha. The plant advertised as implexicoma is a form of this, also Alversoni. 25c.

MAMMILLARIA BOCASANA Poselg.

This beautiful plant is covered with the finest tender hair like spines. \$1

M. CARNEA, an elegant plant, 40-75c

M. COMPACTA, clusters 25c each head.

M. CORNIFERA, large showy fls. 40-50c

MAMMILLARIA DECIPIENS Schw.

Loose tuber led small growing species with delicate & pretty yellow fls. 15c.

MAMMILLARIA DOLICHOCENTRA Lm

M. clava more properly; very long tubercles & spines, of quin appearance. 25c

M. DIOICA K. Brandegee 25-32

M. Goodridgii Engelm. (not of Scheer?), small globular species, closely set with brownish or white spines, the central one curved into a hook. The delicate yellowish white flowers are succeeded by the club-shaped, scarlet berries that possess the flavor of wild-wood strawberries, and are sometimes called "hep-pitalas," the "llavina" of the Mexicans.

MAMMILLARIA ECHINUS Engelm.

Hedgehog mammillaria, heavy stout centrals, & large unique yellow flowers. 20c

MAMMILLARIA ELEGANS DC.

Neat lovely white spines, like a ball of snow, small crimson fls.—most attractive 50c-32

MAMMILLARIA ELEPHANTIDENS Lem.

Elephant's Tooth—so-called from the size & shape of the tubercles. 50c

M. ERRECTA Lem

Mineral del Monte—on high mountains in the cold region of Mexico, yellow spines & fls.

M. FISCHERIANA—see Acahalonium fissuratum.

M. FORDII Orcutt.

Ovate, 2 inches in diameter, and about 3 high,

rarely branching at base; tubercles obtuse, $\frac{1}{4}$ inch across, short, 12 radial spines each one, $\frac{1}{4}$ - $\frac{1}{2}$ inch long, the solitary central back and hooked, $\frac{1}{4}$ inch long; flower an inch long, white with about 9 petals and 9 sepals—the outer with purplish midvein on the back, 6 stamata of a brownish-tan style like pink filaments white and the stamens yellow; flowers in July; Baja California on the west coast collected for L. S. Ford, 1899. Near M. Goodridgii. \$1

MAMMILLARIA FULVISPINA Haw.

None on hand.

MAMMILLARIA GABBII Engelm.

Cactus Brandegeei & Gabbii Coulter, near M. Heideri, with milky juice, "No. 392." \$1

MAMMILLARIA GOODRIDGII Scheer.

We have just collected what is now believed by K. Brandegee to be the typical form. 50c

MAMMILLARIA GLOCHIDIATA Mait.

Most distributed as zephyranthoides. 50c

MAMMILLARIA GRAHAMI Engelm. Plant

1 to 3 inches high, subglobose, simple or branching from the base; tubercles ovate, axils naked; radial spines in one series, 20 to 30 in number, 3 to 6 lines long, rigid and whitish, surrounding a stouter and longer hooked brown one. Flowers small, nearly 1 inch wide, reddish; berry oval, green, with small pitted seeds. The well-known "Arizona Strawberry" or small Fishhook Cactus of N. M., Arizona and Utah, rare in California.

Var. ARIZONICA, a much larger, stouter spined plant—perhaps barbari? Either form, 20c-31

MAMMILLARIA HALEI Brandegee.

§ Cochimela, cereus like, with straight, long stiff purplish brown spines, scarlet fls. similar to E. I. hylum, & large red fruit. \$1

MAMMILLARIA HEYDERI Muehlenpf.

Var. APPLANATA Engelm. 15-30c

M. KRAMERII, 50c.

MAMMILLARIA LASIACANTHA Engelm.

A beautiful feathery looking species, small & irregular looking more like a bunch of down M. LONGIMAMA DC. Mexico,

Flower $\frac{1}{4}$ inches across, 18 canary yellow petals & 12 brownish sepals, 9 greenish yellow stigmata, style green, filaments white, anthers orange color; state of Hidalgo, torrid zone 70c.

MAMMILLARIA MACROMERIS Engelm.

Tubercles large, spines long, flowers $2\frac{1}{2}$ - $3\frac{1}{2}$ inches across of a distinct carmine & fine. 20c.

MAMMILLARIA MEIACANTHA Engelm.

Form of H-yderi, milky juice. 30c.

Var LONGISPINA, more & longer spines 50c.

M. MICROMERIS Engelm. Texas

Mushroom cactus, resembles a silk-covered button, can be handled without gloves 20c.

Var GREGGII, larger, 35c.

MAMMILLARIA MINIMA Reichenb. A tiny Mexican species, cylindrical, forming numerous heads around the base, which readily take root when detached. About 20 slender white spines radiate from the center of each hemispherical tubercle, enveloping the plant like a bit of delicate lace; no central spine.

Stands wet & heavy soil, 25c

M. NICHOLSONI Hort Mexico.

The plant 3 inches across, producing copious wool in the depressed top, tubercles 4-angular,

crowded, 4 cruciate centrals, the longest $\frac{1}{2}$ inch, & numerous short slender white radial spines. \$1

MAMMILLARIA PECTINATA Engelm.

A beautiful plant bearing very large yellow fls, $2\frac{3}{4}$ inches across when fully open, outer sepals reddish-green; petals sulphur yellow. 25c

M. PETER-ONI, 'long white spines interlacing the plant, fine scarlet fls.' \$1

M. PFEIFFERI, covered with golden spines which 'fairly dazzle in the sunlight,' 60c

MAMMILLARIA PHELLOSPERMA E.

Fls rose purple, blooming in the fall; many soft white radial spines, 1-6 hooked brown or black centrals, fruit clavate, bright scarlet, as it is a desert species it needs dryness. 25c-32

MAMMILLARIA PONDII Greene.

Only one, will collect to order,

MAMMILLARIA PUSILLA Sweet.

'This beautiful little cactus is always admired for its bright silvery spines, which radiate in the sun, fls yellowish white with a red stripe in center of petal. 15c

M. RHODANTHA Link & Otto. Mexico.

Produced in succession during the summer, bright rose, a pretty sort. 40c

MAMMILLARIA ROSEANA Bndg.

MAMMILLARIA SCHEERII Muehlpf.

MAMMILLARIA SENILIS Lodd.

MAMMILLARIA SPINOSISSIMA Lem.

Only a few left, \$1

MAMMILLARIA STELLA-AURATA Mt.

Golden-Star; yellow spines in a flat-spreading star-like rosette, a dwarf, much branched 20c

MAMMILLARIA STROBILIFORMIS Shr.

Better known as tuberculosa, 2-5 in. high, often with globose branches at the base 20c

MAMMILLARIA UNCINATA Zucc.

Our plants of this are not typical, but a very pretty distinct form from Mexico. 75c

MAMMILLARIA WILCOXI Tourmey.

Unpublished, exceeding rare, only 2, \$3 ea. h.

MAMMILLARIA WRIGHTII Engelm.

None in stock, wanted

Genus MELOCACTUS De Candolle.

We have none of this genus, import to order.

MYRTILLOCACTUS GEOMETRIZANS C

Cereus geometrizans of old authors, probably cochal is the same, or a form.

Genus NOPALEA Salm.

NOPALEA AUBERI Salm-Dyck. A Cuban cactus, of rapid growth, assuming a tree-like form, and bearing numerous rose-colored flowers with exsert stamens; the branches armed with stout spines; readily grown from cuttings.

NOPALEA COCCINELLIFERA Salm.

The cochineal cactus; cuttings 31c.

N. DEJECTA, Cuba, cuttings 40c

Genus OPUNTIA Tournefort.

Opuntia in 100 varieties, cuttings, 10c-\$1.

OPUNTIA ACANTHOCARPA E. & B.

OPUNTIA ANGUSTATA E. & B.

OPUNTIA ARBORESCENS Engelm.

OPUNTIA ARENARIA Engelm.

OPUNTIA BASILARIS Engelm. & Bigelow.

Low; joints 5 to 8 inches long, triangular, proliferous from their base, pubescent, un-

armed, but beset with numerous dense fascicles of short brownish bristles, as is also the ovary. Flowers large, $2\frac{1}{2}$ to 4 inches in diameter, bright magenta, and very numerous; fruit dry, with large and thick seeds.

Var **RAMOSA** Parish. In cultivation the typical form becomes branched like the variety. One of the most satisfactory cacti that we know for an amateur's collection, flowering profusely and growing readily. In the deserts of California, Arizona, Nevada and Mexico, the whole plant sometimes assumes a brownish red, but in cultivation it seems to maintain a glaucous green color.

OPUNTIA BERNARDINA Engelm.

OPUNTIA BIGELOVII Engelm.

OPUNTIA BRACHYARTHRA E. & B.

OPUNTIA BRASILIENSIS Haw.

OPUNTIA CHLOROTICA Engelm.

OPUNTIA CURASSAVICA Mill.

OPUNTIA CYLINDRICA DC.

OPUNTIA DAVISHI E. & B.

OPUNTIA DULCIS Engelm.

OPUNTIA ECHINOCARPA E. & B.

OPUNTIA EMORYI Engelm.

OPUNTIA ENGELMANNI Sim-Dyck.

OPUNTIA FICUS-INDICA Mill.

OPUNTIA FRAGILIS Haw.

OPUNTIA FULGIDA Engelm.

OPUNTIA FULVISPINA Sim-Dyck.

OPUNTIA GLAUCOPHYLLA Wendl.

OPUNTIA GRAHAMII Engelm.

OPUNTIA GRANDIS Hort.

OPUNTIA INVICTA Brandegee.

OPUNTIA LEPTOCAULIS D C. This is the widely advertised *O. frutescens*, Engelm., of Texas and Mexico; 2 to 4 feet high, with slender terete joints a fourth of an inch thick; very small yellow flowers; berries scarlet. Quite ornamental and a favorite with cactus fanciers.

OPUNTIA LURIDA Hort.

OPUNTIA MACROCENTRA Engelm.

OPUNTIA MACROHIZA Engelm.

OPUNTIA MAMILLATA Schct.

OPUNTIA MICRODASY Preiff.

OPUNTIA MONACANTHA Haw.

OPUNTIA NIGRICANS Haw.

OPUNTIA OCCIDENTALIS Engelm. A Prickly Pear of luxuriant growth, with stout woody stems and innumerable branches: joints 9 to 12 inches long and 6 to 8 inches across; flower yellowish and orange; fruit 2 inches long, very sour and juicy.

OPUNTIA PARISHII Orcutt.

OPUNTIA PHAEACANTHA Engelm.

OPUNTIA PROLIFERA Engelm. This densely-branching shrub bears a small flower of a pomegranate purple, and once grew in great abundance where the city of San Diego now exists.

OPUNTIA RAFINESQUII Engelm.

OPUNTIA ROSEA DC.

OPUNTIA RUFIDA Engelm.

OPUNTIA RUTILA Nutt.

OPUNTIA SENILIS Roezl.

OPUNTIA SERPENTINA Engelm. Procurrent, with yellow flowers, comparatively rare in cactus collections.

OPUNTIA SUBULATA Engelm. A beautiful tropical species of rapid and rank growth, with persistent vivid green leaves, and long, straight spines.

OPUNTIA TENISPINA Engelm.

OPUNTIA TESSELLATA Engelm.

OPUNTIA TUNA Mill.

OPUNTIA VULGARIS Mill.

OPUNTIA WHIPPLEI E. & B.

Genus PELECYPHORA Ehreb.

PELECYPHORA ASELLIFORMIS Ehrenb.
Hatchet cactus, a small rare and interesting plant allied to the mammillarias 30c
PERESKIA ACULEATA Mill.

The Barbadoes gooseberry or Blad-apple, a cactus with leaves like an orange tree, excellent for grafting. 15c

Genus PFEIFFERA Salm.

Only one species, which we have never seen.

Genus PHYLLOCACTUS Link.

PHYLLOCACTUS ACKERMANNI Walp.
Profuse bloomer, fls satiny scarlet with petals acutely pointed, wavy edges; King cactus. 25c
PHYLLOCACTUS ANGULIGER Lem.

Deep notches along the stems like the teeth of a large saw; fls pure white, fragrant. 75c
P. BOLLWILLERIANA, fls. carmine-scarlet, 5 inches across. 50c

P. Conway's Giant: fls often 2 ft. in circumference, deep scarlet shading to purple 75c
PHYLLOCACTUS CRENATUS Walp.

This species, which is a native of Honduras, rivals in size and fragrance of its fls the famous Night-blooming cereus. It grows to a height of 2 feet, with round base branches, the upper portion flattened out and the margins serrated; the flower tube 4 in. long, brownish green like the sepals; petals 4 in. long, creamy white. 10c
PHYLLOCACTUS KAMPMANNI Hort.

Fine free bloomer, fls of exquisite shape, purplish carmine. 50c

QUEEN CACTUS.

PHYLLOCACTUS LATIFRONS Walp.
Popular night-blooming sort. 15c
PHYLLOCACTUS WRAYI Hort.

Fls 8 in. across, yellowish-white. 40c

Genus PILOCEREUS Lemaire.

Included under *Cereus*.

||angulosus Steib.
||a'bispinus Salm
||auratus Salm—flavicomus
||barbatus
||runnowianus Haage
||Columna Lemaire & var. ||Trajani
||omatus Lab ||cometes ||onsolei ||Dautwitzii
||floccosus fo-sulatus Lab \$1—||Fonachei
||Ghiesbreghtii ||Haage ||Poselg.
||Haworthi DC. see nobilis—||Bermantii Woyw.
||Hoppensstedti—||Houlletii & v. glaucescens
||Sarg ntiianus reutt—form of Schottii?
||Schottii & v. australis new
||seuilis—||virens ||import to order only.

Genus RHIPSALIS Gaertn.

RHIPSALIS CASSYTHA Gaertn.
RHIPSALIS SALICORNIODES Haw.

PLANTS.

AGAVE AMERICANA Linn.—The celebrated maguay or American aloe. 25c-30c
—Var Milleri, a glaucous form freely planted for tropical effect 25c
—Var. striata, leaves irregularly marked with white down the center. \$2 00

—Var variegata, leaves margined with pale yellow, very decorative 10c-\$10
—ALBICANS Jacobi, a Mexican with broad thin light green leaves. \$1 00
—applanata..... 1 00
—atrovirens, Karw..... 50
—attenuata, Salm..... 1 00
—besseriana—see macroacantha.
—DECIPIENS Baker, foliage apple green with stout black terminal spines 35c
AGAVE DESERTI Engelm.

The mescal of the desert, glaucous foliage. \$1
—ENGLMANNI Trelease, one seedling only—Espadilla—see xylonacantha.
—FEROX Koch, flat hooked deeply notched twisted spines. \$2
—geminiflora Ker-Gawl..... 1 00
—ghiesbreghtii C. Koch..... 1 00
—GILBEYI Hort. One of the most symmetrical and handsome species. \$1
—HETERACANTHA Zuccarini, better known as lecheguilla, from Texas. 75c

AGAVE HORRIDA Lem.
See Gilbeyi \$1 00
AGAVE LECHEGUILLA Torr.
See heteracantha 75c
—macroacantha, Zucc..... 1 00
—maculata Regel ["Texana"]..... 50

AGAVE MARGARITAE Brandege. A recent introduction from the islands off Lower California, and one of the handsomest of the smaller growing agaves.

A few remain at \$1-4
AGAVE MICRACANTHA Salm-Dyck.
One only remains. \$1
AGAVE PALMERI Engelm. A very symmetrical species, found in the mountains of Southern Arizona.

We have several yet in stock. Prices \$1-\$10.
AGAVE PARRYI Engelm.
Perhaps properly applanata. \$1
—potatorum Zucc..... 1 00

AGAVE PRINGLEI Engelm.
None in stock, orders booked. \$5
—rigida Mill..... —
—v. sisalana..... 25
—Salmiana Otto, our one plant under this name appears to be a Furcraea! \$1
—salmiana Otto—see atrovirens.
—Sebastianiana Greene, near Shawii, from Guadalupe Island? only one plant. \$15

AGAVE SHAWII Engelm. Very compact, dark olive-green leaves, margined with stout spines. Peculiar to the coast region of Southern and Lower California.

Fine plants 50c-\$5
AGAVE STRIATA Zucc.
Out of stock.
—subulata?..... 1 00
—sulcata?..... 2 00

AGAVE UNIVITTATA Haw.
A pretty species, with slender narrow-margined leaves armed with slender gray spines. 75c

AGAVE UTAHENSIS Engelm.
 Resembles a dwarfed Parryi. 50;
 — *Vershaeffeltii* Lemaire, one plant of doubtful
 identity. 75c

AGAVE VICTORIAE-REGINAE T. Mre.
 One only in stock, orders booked. \$3

AGAVE XYLONACANTHA Slm-Dyck.
 A few established plants at \$2

ALOE AFRICANA Mill.
 A plant of tropical aspect, growing several feet
 high; leaves apple green, narrow, curving down-
 ward, margined with short erect spines; produ-
 ces a spike of showy red flowers, quite orna-
 mental in effect and being of rapid and easy
 growth can be recommended highly. 10c-1

ALOE BREVIFOLIA Mill.
 Light green leaves with short horny spines
 on all sides forming a beautiful rosette 6 inches
 or more across. 10c-1

A. GRACILIS, a tall slim species with narrow
 dark green leaves & green fls 50c

A. LAIFOLIA, broad dark green leaves
 blotched and mottled with lighter green, mar-
 gined with stout short spines; of rapid growth
 with showy red flowers. 25c-1

A. MITRIFORMIS XANTHACANTHA, an ar-
 borescent species with broad short & stout
 leaves margined with light yellow spines, a
 magnificent sort. \$1

A. PI TA, resembles *latifolia* but smaller with
 narrower leaves. 50c

A. SUCOTRINA Lam Light green narrow
 acuminate leaves with short marginal spines
 —leaves occasionally spotted with white; a
 large showy sort. 60c-1

ALOE VARIEGATA Linnaeus. An African
 plant of great beauty, producing spikes of bril-
 liant coral red flowers. It is found in many
 old-fashioned gardens and receives its com-
 mon name from the feathery mottling of the
 leaves.

YERBA MANSE.
ANEMOPSIS CALIFORNICA B. & H. This
 is one of the favorite medicinal herbs of the
 old Spanish Californians, but has won a per-
 manent place in European greenhouses, and
 should be given the attention it deserves in
 the land of its birth. It is readily grown in
 moist soil, the apple-green foliage, frequently
 blotched with crimson, showing off the rather
 large white flowers to great advantage.
 35 cents;

BRYOPHYLLUM CALYCLINUM Salisb —"spr uing-
 leaf", so-called because a leaf roots so quick
 when placed on damp earth; quite curious. 5c

Cacalia repens—see *Senecio succulentus*.

CARAGUATA LINGULATA Lindl.
 75c

COTYLEDON ATTENUATA Watson.
 A dwarfish species resembling *elufis*, with
 yellowish flowers, discovered in 1886, and intro-
 duced by C. R. Orcutt; useful for borders. 10c

C. Californica—the true name of this pretty sp.
 proves to be *sempervivum calcareum*.

C. EDULIS Brewer (*Sedum edule*).
 "adies' Fing'er Tips" so-called from the round,
 slender leaves, said to be eaten for salad by the
 Indians; much larger than *attenuata*. 20c

C. LANCEOLATA Bentham & Hooker.
 Does well under good treatment, producing a

spike of red or yellow flowers. The lanceolate
 flat leaves sometimes of a dull crimson color,
 but commonly green; 6 inches across. 20c

C. LAXA Bentham & Hooker
 Leaves curiously twisted; flowers red or yel-
 lowish—much like *lanceolata* otherwise. 40c

C. LINEARIS Greene. Lower California.
 Another plant first introduced into cultivation
 by C. R. Orcutt, and similar to *lanceolata*. 3c

C. ORBICULATA Linnaeus. South Africa
 An old time garden favorite, attaining a height
 of several feet and tropical in aspect; produces
 large pendulous orange colored flowers of rare
 beauty and permanence; of rapid growth 10c

COTYLEDON ORCUTTII Greene.
 Near *attenuata*, but different inflorescence,
 flowers tinged with pink; excellent border. 10c

C. PULVERULENTA Faber.
 A plant of great beauty when at its best, with
 broad leaves covered with a thick white powder,
 elegant in form. 25c to \$2

C. SECUNDA Baker. Mexico.
 Very beautiful symmetrical plant—used ex-
 tensively in parks, rockeries, borders, &c 10c

COTYLEDON VISCIDA S. Watson.
 Handsome apple green foliage and sprays of
 rose purple flowers; a great novelty. 75c

CRASSULA FALCATA Wendl. A South Afri-
 can plant, grayish in color, producing gor-
 geous panicles of brilliant red flowers.
 25c;

EUPHORBIA SPLENDENS Boj.
 30 cents;

FURCRAEA BARILLETTI Jacobi.
 25c; 75c

GASTERIA MACULATA Haw.
 There are about 25 varieties of *Gasterias*, all
 quite similar in appearance, with tongue-shaped
 white-spotted leaves. 25c

G. LINGUA, NIGER, PUN TATA, VERRUCOSA,
G. SPIRALIS var *RECEDA*, each 20c

We do not guarantee these names correct.
HAWORTHIA MARGARITIFERA, 15c

—*REINWARDTII*, 30c—40 other var. to order.
Kleinia articulata—see *Senecio articulatus*.

—*repens*—see *Senecio succulentus*.

**MESEMBRYANTHEMUM AEQUILATER-
 ALE** Haworth. Beach Strawberry or Sea-
 apple. An Australian and West African
 creeping plant, spreading readily over saline
 ground, whether clayey, sandy or rocky.
 "Sheep are very fond of this succulent plant,
 and require but little water when browsing
 on it; or in cold coast districts they will do
 without any water, even in summer, while
 thriving well on the foliage." The brilliant
 red flowers are very fragrant, followed by
 large, sweet and delicious fruit, faintly sug-
 gestive of a strawberry. An ornamental
 plant, easily grown from cuttings.

Plants, 25 cents each.
MESEMBRYANTHEMUM CRYSTALLINUM

Ice plant, we see advertised at 15-25c; as it is
 an annual we advise growing from seed. 1kt 5c
M. tigrinum and other sorts, cuttings 10c.

SEDUM SPATHULIFOLIUM, cuttings 5c
 —*VARIEGATUM*, tubers 15c per dozen.

SEMPERVIVUM CALCAREUM (S. californica, Cotyledon californica — native of Europe. 5c	— pilosus (steinsii, posegerianus, recurvens) .20
S. HOLOCHRYSUM, 20c	— rodophthalmus 20 ; Scheeri, seti-pinus... .15
SENECIO ARTICULATUS, 'candle plant' 5c	— Texensis 15c; turbiniformis viridescens .25
— SUCCULENTUS, 'cotyledon caerulea' 25c	— Wislizeni ½ oz ½2.... .25
STAPELIA ASTERIAS Mass.	Mammillaria Alversoni, Arizonica 25
S. CILIOLATA	— applanata 10c; bicolor, candida 15
STAPELIA CONSPURCATA Willd.	— carnea, clava (dolichocentra), elegans... .25
STAPELIA FUSCATA Jacq.	— e hinus, fulvispinus, fuscata, goodrichii .15
STAPELIA GRANDIFLORA Mass.	— Grahami, macromeris, micromeris & v. .15
S. HISPIDA	— meiacantha, Nickelsii, Parkissonii 20
STAPELIA MARMORATA Jacq.	— pectinata, phellosperma, pusilla 5
STAPELIA PICTA Donn.	— recurvata 15c; rhodantha, sanguinea 25
STAPELIA PULCHELLA Mass.	— uncinata 10

S. RECTIFLORA
S. SISYPHUS
STAPELIA TRISULCA Donn.
S. VARIEGATA.

FERNS.

Adiantum emarginatum ½ 100: \$6 00
Aspidium munitum 15 00
Asplenium trichomanes var. incisum. 10 00
Cheilanthes Californica. Lace fern 10 00
Clevelandi, Lip fern, exquisite, rare... 10 00
myriophylla, Fendler's Lip fern 10 00
viscida, Desert Tea fern, rarely collected 10 00
Gymnogramme triangularis, Gold fern... 4 00
var. viscosa, California Silver fern 4 00
Notholena Californica (cretacea, candida) 10 00
Newberryi, the famous Cotton fern 6 00
Parryi, Dr. Parry's Desert Cloak fern 20 00
Pelæa andromedæifolia, Wire fern 6 00
ornithopus, Tea fern, easily grown... 4 00
Polypodium Californicum, Polypody 4 00
Pteris aquilina 4 00
Woodsia Mexicana 30 00
Woodwardia radicans, grows 10 ft. high... 1: 00

SEEDS.

CACTUS SEEDS.

Astrophytum myriostigma ½ pkt. \$30
Anhalonium fissuratum 25
— Lewinii 20
— prismaticum 25
— Williamsii 20
Cereus adustus 15
— Berlandieri, chloranthus, dasyacanthus 20
— Emoryi, Engelmanni, enneacanthus 20
— gemmatus 35
— giganteus, ½ oz ½2 30
— grandiflora, night blooming 25
— paucispinus, pectinatus, procumbens 15
— pugioniferus & v. geometrizzans 30
— rigidissimus. Rainbow cactus 20
Echinocactus bicolor, brevihamatus 20
— capricornis, cornigerus & v. flavispinus 30
— coptonogonus, cylindraceus 25
— Lecointei, longhamatus, lophothele 20
— Mathsonii, McDowellii, Orcuttii 25

FLOWER SEEDS

Price per packet, 5 cents, when no price is otherwise indicated; } indicates 10 c. a packet.

Abronia } maritima & umbellata
Aquilegia caerulea }
Arctostaphylos Pringlei }
Australian salt bush
Calendula officinalis & tall var.
Ceanothus hirsutus, a new flowering shrub with evergreen foliage & profusion of delicate blue flowers, one of the California lilacs. 25c
Centaurea depressa
Clarkia elegans alba
Convolvulus mixed morning glory
DELPHINIUM CARDINALE Hook.
The splendid scarlet larkspur. 30c
DICENTRA CHRYSANTHA H. & A.
A beautiful thing, delicate green foliage. 25c
EMMENANTHE PENDULIFLORA Bth.
California Yellow Bells one of the loveliest of the wild flowers of the Golden State — suggestive of the lily of the valley; often a disappointment in cultivation. ½ oz. ½3; pkt 25c
Freesia refracta alba
Fremontodendron Californicum, 30c

LATHYRUS SPLENDENS Kellogg. By far the most gorgeous and beautiful flowering vine in the west, producing masses of brilliant crimson flowers.

LEPTOSYNE MARITIMA A. Gray. (½ oz \$2, 10 & 20 — subject to failure of crop

MINA LORATA Cerv. (Ipomœa, versicolor). Stems of flowers usually in pairs with as many as 40 buds and flowers, the buds of a rich poppy red at first, gradually changing to canary yellow, and when open of a pure white, tinged with yellow at the base and faintly flushed with rose around the edge of the corolla; the exert filaments straw yellow, others Indian yellow; as buds and full blown flowers appear continuously for a long period in profusion this makes a beautiful show; luxuriant in growth. } ½ oz 50c

PALM SEED.

ARENGA SACCHARIFERA Labill. The Sugar Palm, of India; the juice is converted into toddy or sugar; the young kernels made with syrup into preserves. The pitch supplies sago, about 150 lbs. from a tree, according to Roxburgh.

ARTOCARPUS INTEGRIFOLIA Linn. The Jack Fruit, of the Malay Islands; attains a weight of 50 pounds.

✓ **CHAMAEROPS EXCELSA** Thunb. The hardest of all palms; had stood three degrees above zero F. without protection; beautiful fan-shaped leaves.

✓ **CHAMAEROPS HUMILIS** Linn. The dwarf fan palm of southern Europe; very ornamental, and eligible for scenic effect; hardy.

✓ **ERYTHEA ARMATA** Watson. The beautiful Blue Palm, of Lower California; the fan-shaped leaves of a soft, glaucous color; the fruit is the size of a marble, and largely eaten by the Indians of the desert region where it grows wild.

♢ lb \$3, 10 lb \$25, 100 lb \$200; order early.

✓ **ERYTHEA EDULIS** Watson. The Guadalupe Island Palm; "of equal decorative value to *Lantana borbonica*, much hardier, and of far more rapid development."

same prices as *armata*

✓ **JUBAEA SPECTABILIS** Humboldt. The tall and stout Coquito Palm of Chili; hardy; yields small edible kernels; a kind of treacle is obtained from the sap; leaves sometimes 10 ft. long.

✓ **OREODOXA REGIA** Humboldt. The Royal Palm, "the Glory of the Mountains;" the grandest of the pinnate leaved palms.

✓ **PHENIX CANARIENSIS** Hort.

Elegant, most hardy, ornamental variety of date palm, much used for lawns in Southern California. ♢ 100 seeds 50c

✓ **PHENIX DACTYLIFERA** Linnaeus.

The well known date palm. ♢ 100 seeds, 50c.

✓ **PHENIX RELINATA** Jacquin.

Popular for a desert planting.

✓ **PTYCHOSPERMA ELEGANS** Blume. Leaves 2 to 10 feet in length, widely known under the name of *Seaforthia elegans*, R. Br.

✓ **THRINAX ARGENTEA** Lodd. One of the most elegant of fan palms, the under part of the leaves shining like satin; native of Panama.

✓ **WASHINGTONIA FILIFERA** Wendl. The popular Californian fan palm; a hardy and magnificent species of the desert region of Southern California.

✓ **WASHINGTONIA ROBUSTA** Wendl.

A favorite strong-growing variety of filifera. ♢ lb \$3, 10 lb \$25, 100 lb \$200. Sept delivery.

TREE AND SHRUB SEEDS.

Prices quoted are per lb; many of these we collect, grow, or import, only to order; we give no guarantee, expressed or implied, but our reputation as botanists ensures the greatest possible accuracy. All former quotations are hereby cancelled.

*Synonyms—quoted under true names also.

†Species first introduced by our house.

Genus **ABIES** Link.

The firs are magnificent trees, of pyramidal form and rapid growth.

Abies alpinensis \$10—*alba* 6—*alcoquina* 10—*amblyotis* 6—*alsamea* 2—*bracteata* 10

ABIES BRACHYPHYLLA Maxim.

Japan; oz 80c

canadensis 4

ABIES CONCOLOR Lindl.

The silver fir is a very ornamental tree, growing 8-150 feet high, attaining a diameter of 3-4 feet. Foliage of a pale silvery green—whence its name. ♢ lb \$—

—*Douglasii 3 Engelmannii 8—*excelsa* 2

ABIES FIRMA Sieb & Zucc.

Japan; oz 50c

—*fraseri* 3—*grandis* 4—**hookeriana* 8

ABIES HOMOLEPIS Sieb. & Zucc.

Japan; oz \$1

—**lasiocarpa* 4—*magnifica* 5—**macrocarpa* 10

ABIES MARIESII Mast.

Japan; oz 80c

—**menziesii* 5—**mertensiana** 8—*nordmanniana*

—*notabilis* 5—**pectinata* 2—**pinsapo* 5—**polita* 10

ABIES SACHALINENSIS Mast.

Japan; oz \$1

—*subalpina* 5—**williamsonii* 8—**yezeensis* 10.

ABIES VEITCHII Lindl.

Japan; oz 80c

✓ *Acacia dealbata* 5—**decurrens* 4—**floribunda* —

✓ *latifolia* 5—**melanoxydon* 5—**mollissima* 5

✓ *Acer circinnatum* 2—**glabrum* 1—**macrophyllum*

—1—**saccharinum* 3

✓ *Esculus* (al. 3)—**flava* 2—**glabra* 2—**Parryi* 7

✓ *Atlantus glandulosus* 1

✓ *Andromeda arborea* 1

✓ *Arbutus menziesii* 2—**unedo* 4

✓ *Arctostaphylos bicolor* 3—**glaucia* 1—**manzanita*

4—**pungens* 4—**tomentosa* 2—**uva-ursi* 3—**oppositifolia* 10—**diversifolia* 10

✓ *Asimina triloba*, pawpaw, 1.

✓ *Audubertia polystachya*, white sage, oz 4

✓ *Azalea arborescens* oz 1—**calendula* 8—**mollis* 5

—**occidentalis* —**Vaseyi* 2—**viscosa* 8—all ♢ oz

✓ *Berberis aquifolium* 4—**thunbergii* 3—**vulgaris* 2.

Brahea edulis* 3—filamentosa* 1—**glaucia* 3

—**robusta* 3—**roezlii* 3—see Palm seeds.

✓ *Buxus sempervirens*, Evergreen Box, 4

✓ *Calycarpa americana*, dried berries 1.

✓ *Calycanthus floridus* 1—**occidentalis* 3.

✓ *Carpinus americanus* 2

✓ *Castanea americana* ½—**Japonica* 2

✓ *Catalpa bignonioides* 4—**speciosa* 8

✓ *Ceanothus divaricatus* 5—**integerrimus* 5

✓ *thyrsiflorus* 5

✓ *Cerasus ilicifolia* 1—see *Prunus ilicifolius*.

✓ *Cercis occidentalis* 6

✓ *Cornus floridus* ½—**nuttallii* 2

✓ *Crataegus coccinea*, scarlet-fruited thorn, 1

Genus **CUPRESSUS** Tournefort.

The Californian species of cypress are among the most widely planted of evergreens, & are very ornamental. The Monterey cypress is much used for hedges; the Lawson cypress is a species of *Chamaecyparis*.

C GOVENIANA Gordan.

Low bushy shrub or tree. ♢ lb \$3

CUPRESSUS GUADALUPENSIS Watson. The Guadalupe or blue cypress is a small tree with slender, light green, drooping branchlets; the bark, flaking off, leaves a claret-red surface to the limbs.

♢ lb \$3; 10 lb \$25; 100 lb \$200. Trees —

C. *Lawsoniana*—see *Chamaecyparis Lawsoniana*

C. *Menabiana*, a graceful shrub, rarely over 10

feet high. ♢ lb \$2

CUPRESSUS MACROCARPA Hartweg. Monterey cypress, a familiar hedge-tree in California, cones the largest of the genus, about an inch thick.

♢ lb \$; trees ♢ 100 \$—

JUGLANS CALIFORNICA Watson. The California Black Walnut is a tree or large shrub, producing small nuts of an excellent flavor, preferred by some to the Madeira nut. A grand ornamental tree, attaining a height of 60 feet, prolific, and could be advantageously grown in arid localities.

Juglans cinerea, butternut..... \$3 40
J. cordiformis..... 80
J. nigra, Black walnut..... 40
J. regia, Madeira nut..... 30
J. Sieboldi..... 1 00

Juniperus californica Carr..... 2 00
J. occidentalis Hooker..... 2 00
J. virginiana L. Red cedar..... 60

Kalmia latifolia, Laurel..... 5 00
 Kentucky coffee tree..... 50
Libocedrus decurrens, White cedar..... 3 00
Liriodendron tulipifera, tulip poplar..... 1 00

Loquat..... 1 00
Lupinus arboreus..... 8 00
Magnolia glauca, sweet bay..... 3 00
MAGNOLIA GRANDIFLORA Linnaeus. A beautiful flowering evergreen tree.

M. grandiflora, dried berries..... 1 60
M. macrophylla " "..... 2 00
M. tripetala, " "..... 2 00
Myrica californica..... 3 00

Negundo aceroides, Box elder..... 40
N. californica..... 1 00
Nicotiana affinis, wild tobacco..... 1 00
N. glauca, Tree..... 1 00

Notina Bigelovii..... oz \$1
N. Palmeri, to order..... —
Nyssa multiflora, Black gum, dried berries..... 40
Oreodaphne californica..... 1 00

Photinia arbutifolia..... 1 00
Picea amabilis..... 4 00
P. bracteata..... 10 00
P. concolor..... 4 00
P. Engelmanni..... 8 00
P. grandis..... 3 00
P. magnifica..... 5 00
P. nobilis..... 5 00
P. pungens..... 8 00
P. subalpina..... 8 00

Pinus Benthamiana..... 4 00
P. contorta, cones 75 lb 30c..... 10 00

PINUS COULTERI Don. Big-cone pine, — the "cone elongated, elliptical, of matchless size and weight, 15 to 20 inches long, and often weighing 5 to 8 pounds."
P. coulteri, cones 30c each..... 3 00
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P. Fremontiana—see *monophylla*..... 2 00
P. insignis..... 2 00
P. Jeffreyi..... 3 00
P. Lambertiana, sugar pine, cone 25c..... 2 00
P. monophylla, nut pine..... 2 00
P. monticola..... 5 00
P. muricata, cone 10c..... 6 00
P. Parryana Torr., pinyon..... 4 00

PINUS PONDEROSA Dougl. Western yellow pine. Trees of the largest size, 200 to 300 feet in height, and 5 to 15 feet thick.
P. ponderosa..... 3 00

PINUS RADIATA Don. (*P. insignis*, Loudon.) Monterey pine; a popular tree for California planting.
PINUS SABINIANA Dougl. Gray-leaf pine; one of the nut pines, or "Digger Pine," the large seeds of which were formerly used for productive. A vigorous grower. or more, the main stems often with a circumference of 50 feet."
P. sabiniana..... 1 00
P. strobus, white pine..... 3 00
P. Torreyana Parry..... 3 00
P. tuberculata..... 4 00

Platanus occidentalis, sycamore..... 50
P. racemosa..... 1 00
Prunus bicifolia..... 1 00
P. serotina..... dried berries..... 50
PSIDIIUM *Cattleyanum* strawberry guava..... 3 00
Quercus agrifolia 3—*chrysolepis* 2—*duposa* 2
Q. emoryi 1—*Engelmanni* 6—*Kelloggi* 3—*Palmeri*
Rhamnus californica 4—*carolinus* dry berries, 1
Rhododendron californicum maximum oz. \$1
Rhus copalina, dried berries..... 40
R. glabra..... 40

RHUS INTEGRIFOLIA Nuttall. A stout evergreen shrub, at times attaining to the rank of a tree, and a diameter exceeding five feet. The rose colored flowers produced in close panicles one to three inches long, followed by deep brilliant red berries, coated with an icy-looking, wax-like substance that is even more tart than the pleasantly acid berries. These berries make a cooling drink, equal to lemonade (almost indistinguishable in flavor.)
 In Southern and Lower California this is often called Mahogany, from the rich and beautiful color of the wood.
R. integrifolia, Lemon berry..... 4 00
R. ovata, sugar berry..... 6 00
Ricinus communis, castor bean..... —
Ranzibrensis..... 1 00
Romneya coulteri..... oz \$..... —
Rosa californica, hips oz \$1—*minutifolia* oz \$1

SCHINUS MOLLE Linnaeus. The Peruvian, or Mexican, Pepper tree, one of the most graceful and popular of ornamental trees in California; with pendant, fern-like, foliage, and bearing clusters of beautiful rosy-red berries.
Schinus molle..... 1 00
SEQUOIA GIGANTEA Lindl & Gordon. The Giant Redwood, or "Big Tree" of California—the largest tree known in the world.
SEQUOIA SEMPERVIRENS Endl. Redwood, "one of the most colossal trees of the globe."
Taxus brevifolia..... 8 00
Thuja gigantea..... 6 00
Torreya californica..... 1 00
Vitis californica, grape..... 1 00
Yucca aloifolia a oz 50c—*arborescens* 1—*baccata*
 —*brevifolia* 1—*mojavensis* ('baccata') 40c
 —*truncata* 1—Whipplei 40c

QUEER THINGS.

- Scorpio allenii, scorpion, 30c.
- Trap-door spider 25c, nest (portion with lid) 25c.
- Crabs 5c to \$1—also other crustacea, barnacles &c
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- Strongylocentrotus purp rascens 10 @ 10c.
- Egg of Leopard shark, Heterodontus fran isi, odd, resembles a piece of twisted glue, 15c.
- Devil fish, Octopus punctatus, 50c
- Goose barnacles, very odd, 10c
- Feather moss, Aglaophenia struthionides, 25c.
- Pinus Torreyana cone 35c

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